



# Rhepanol® hg



Product name: Rhepanol® hg

Manufacturer: FDT FlachdachTechnologie GmbH & Co. KG

Eisenbahnstraße 6-8 68199 Mannheim

Germany

**Production plant:** Mannheim

**Type of application:** For sealing ballasted, gravelled or green roofs.

These sealing membranes can be used as a moisture barrier (type A) and as a ground

water barrier (type T).

For the installation, the application guidelines of the manufacturer have to be observed.

**FPC certificate no.:** 1343-CPD-K06-0660.10

1343-CPD-K06-0660.11 1343-CPD-K06-0660.12 1343-CPD-K06-0660.18

FPC issue of certification: 06

**European standard:** EN 13956/EN 13967

**Product description:** Synthetic roofing membrane made of PIB with

glass fleece reinforcement and compatible with bitumen. Effective thickness 1.5/1.8 mm.

**Standard membrane dimensions:** 15 m x 2.05 m x 1.5 mm (1.8 mm)



# Rhepanol® hg 1.5 mm (1.8 mm)

| Properties   | EN standard                          | Results   |
|--|--------------------------------------|---|
| External fire performance                                | DIN CEN/TS 1187                      | no standard   |
| Reaction to fire   | DIN EN ISO 11925-2<br>DIN EN 13501-1 | class E   |
| Water vapour property µ                                  | DIN EN 1931 (method B)               | ≥ 160,000   |
| Tensile strength   | DIN EN 12311-2 (method B)            | ≥ 4 N/mm²   |
| Elongation at break                                      | DIN EN 12311-2 (method B)            | ≥ 400%  |
| Joint peel resistance                                    | DIN EN 12316-2                       | ≥ 150 N/50 mm   |
| Joint shear resistance                                   | DIN EN 12317-2                       | ≥ 200 N/50 mm<br>(fracture outside the joint area)                              |
| Resistance to impact rigid substrate flexible substrate  | DIN EN 12691                         | ≥ 700 mm<br>≥ 700 mm  |
| Resistance to static load                                | DIN EN 12730 (method A/B)            | ≥ 20 kg   |
| Hail resistance<br>rigid substrate<br>flexible substrate | DIN EN 13583                         | ≥ 20 m/s<br>≥ 30 m/s  |
| Tear resistance  | DIN EN 12310-2                       | ≥ 150 N   |
| Resistance to root penetration                           | FLL<br>DIN EN 13948                  | root- and rhizome-resistant   |
| Dimensional stability                                    | DIN EN 1107-2                        | ≤ 0.5%  |
| Foldability at low temperature                           | DIN EN 495-5                         | $\leq$ -40 °C (foldability up to -60 °C proofed by external testing laboratory) |
| Exposure to bitumen                                      | DIN EN 1548                          | passed  |
| Chemical resistance                                      | DIN EN 1847<br>(List annexe C)       | passed  |
| UV exposure  | DIN EN 1297                          | class 0 (5,000 h)   |
| Watertightness   | DIN EN 1928 (method B)               | ≥ 400 kPa   |

### FDT legal notice

We refer emphatically to the fact, that all details mentioned, especially the application and utilisation recommendation for the products and their system accessories, have been developed under normal conditions, and based on our knowledge and experience. Appropriate storage and usage of the products are assumed. A warranty or reliability of a finished project cannot be deduced because of varying materials, substrates and differing work conditions, neither by any indications nor from verbal statements, irrespective of any legal positions. For the possible accusation that FDT acted intentionally or grossly negligent, the user has to supply evidence that they provided FDT with all information and details necessary for an appropriate and correct evaluation through FDT in written form, immediately available and complete. The user is responsible for ensuring that the products are suitable for the given application. It is FDT's right to change product specifications without notice. Property rights of third parties are to be considered. In addition our particular sales and delivery terms are valid. The latest version of our product data sheet is obligatory, which can be requested directly through FDT.

All information as well as all technical and drawing data comply with current technical standards and are based on our experience. National standards and regulations must be observed.

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## **Product information**

## Rhepanol hg – sealing in loose-laid layer build-up with ballast and roof garden system

Rhepanol hg is a roofing membrane made of polyisobutylene (PIB) according to DIN EN 13956, and a waterproofing membrane made of polyisobutylene (PIB) according to DIN EN 13967. The only difference is that Rhepanol hg reinforcement is not achieved by a fleece backing, but by a central glass fleece reinforcement. Furthermore, Rhepanol hg is optimised for hot-air application. So for joining the seams only hot-air welding is used. Owing to the outstanding material characteristics, roofing membranes Rhepanol hg are suitable for single-ply application.

#### Characteristics

- Long-term proven material polyisobutylene (PIB). A roofing membrane following the standard DIN EN 13956 according to the General Building Construction Supervision Test Certificate ABP-No. P-K 021/03.11 MPA Darmstadt
- Root- and rhizome-resistant according to the FLL method and DIN EN 13948
- Compatible with bitumen
- Highly resistant to perforation
- Certified in a life cycle assessment according to DIN EN ISO 14040 ff
- Free from plasticisers and halogen fire-proofing agents
- Reaction to fire: class E according to DIN EN 13501-1
- Permanently resistant to UV radiation
- Hail-resistant according to EN 13583
- Compatible with all kinds of insulation materials
- Flexible at temperatures as low as –60 °C
- Hot-air weldable
- Dimensionally stable due to the glass fleece reinforcement
- Application without open flame
- Compatible with Rhepanol fk
- Certified with an Environmental Product Declaration (EPD) according to ISO 14025 and EN 15804

#### **Quality assurance**

Rhepanol hg is subject to constant in-house and external quality control. The in-house quality assurance system for the whole company has been certified according to DIN EN ISO 9001, the world's most strict quality standard, and is constantly monitored by TÜV SÜD Management Service GmbH.

#### Range of application

Rhepanol hg is used as a roof sealing in loose-laid layer build-up for ballasted, gravelled or roof garden systems.

## **Ecology and environment:**

Rhepanol hg has gone through a life cycle assessment according to DIN EN ISO 14040 ff. carried out by the independent institute C.A.U. GmbH (Gesellschaft für Consulting und Analytik im Umweltbereich) (Company for Ecological Consulting and Analytics Ltd). FDT will be glad to send you on request a summary of the life cycle assessment and the Environmental Product Declaration. Rhepanol is not a dangerous good according to the EU Ordinance on Hazardous Substances.

SIG Design & Technology

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